



Minutes of the HALO-(AC)³ meeting in Berlin, 28 June 2018, 10:00-15:00

Participants

Speaker plus Scientific Coordinator of (AC)³

Manfred Wendisch (LIM)
Christa Engler (LIM)

(AC)³ project members

André Ehrlich (LIM)
Bernd Heinold (Tropos)
Christof Lüpkes (AWI B)
Roel Neggers (Uni K)
Annette Rinke (AWI P)
Michael Schäfer (LIM)
Vera Schemann (Uni K)
Heiko Bozem (MPI Mainz)

Potential collaborators for the measurement campaign

Felix Ament (Uni HH)
Silke Groß I (DLR)
Felix Pithan (AWI B)
Jörg Schmidt (LIM)
Anja Schwarz (LIM)
Andreas Wieser (KIT)
Tobias Zinner (LMU)

MW:

- As a result of this meeting a White Paper should be compiled, where the scientific objectives should be summarized, taking into consideration of contributions of all participants.
- Campaign will take place 8 March to 4 April, 2021
- Suggestion: aircraft base in Kiruna. Better than Svalbard because of the available infrastructure

FP:

- Will the boundary layer measurements will take place simultaneously?
- Possibility of using AWI Polar aircraft?
- Possibly data available from a Sea Ice campaign at the same time?
- Is there a possibility to use an aircraft from the University of Braunschweig (Dornier 128, 2021 last year of operation)?

RN:

- CSET campaign: adaptive flight patterns. Contact people from CSET?
- Absolutely crucial is close cooperation with people from the weather forecast (e.g. DWD, ECMWF) or to do it ourselves.



- RN will invite for proposals for forecast during HALO-(AC)³ at our 2nd Science Conference.
- It has to be taken care of availability of data during the campaign! Getting the data has to be secured! (E.g., ECMWF analysis as basis for the forecast)
- Idea: Christoph Knothe has done forecasts for aircraft campaigns already.
- Possibly there is the option to run LES on site for trajectory forecast.
- Question to the modelers: which flight height would be optimal?
 - Height of intrusions would be ideal, but they usually are at 0,5 to 1 km. HALO usually flies much higher.
 - Several cross sections at the same height are more preferable than saw tooth flight patterns.
 - Dropsondes ideally at 7 to 8 km
 - another argument for the usage of a second aircraft (maybe at 3 km or so)

AW:

- Christian Grames: junior research group (Helmholtz) at KIT
- Christoph Kottmeier will be retired at the end of 2019.
- Dropsondes: around 500€ per sonde
 - Time resolution of around 1,5s
 - Falling velocity: maximum of 25m/s or slower, depending on the size of the parachute
 - In updrafts: max. 3m/s upwards possible

MW

- Presentations will be collected and made accessible for the participants of the meeting (Speicherwolke).
- MW will prepare the White paper – release in September/October of 2018 with contributions of all participants
- Suggestion for the next meeting, e.g., combined with (AC)³ General Assembly in January 2019
- During the next call of the HALO SPP (to be issued in July 2019) we will apply for the mission costs of HALO-(AC)³.
 - In parallel a mission proposal and specific science proposals, which are related to the mission, will have to be prepared.